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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,321	12/15/2003	Anthony M. Hughes	601901-1010	3733

24504 7590 09/26/2007  
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ATLANTA, GA 30339-5948

EXAMINER
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WYROZEBSKI LEE, KATARZYNA I

ART UNIT	PAPER NUMBER
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1714

MAIL DATE	DELIVERY MODE
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09/26/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/736,321

**Applicant(s)**

HUGHES ET AL.

**Examiner**

Katarzyna Wyrozewski

**Art Unit**

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 16-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-40 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/15/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

1. Claims 16-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected claims of Group II and III, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/17/2007.

The applicant's arguments regarding undue burden on examiner and financial burden on the applicants are considered but not found as persuasive. Election/restriction is therefore FINAL.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by ESPELAND (US 6,034,155) or ESPELAND (US 6,048,593).

The prior art of ESPELAND discloses composition that can be utilized as a patching material and surfacing for bridge deckings, manholes, and the like. The composition is referred to as concrete composite (col. 1).

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Resin – polymers utilized in the composition of ESPELAND include blends of polyester resin both rigid and flexible, vinyl ester polymer, polyester-polyurethane and epoxy (col. 1-2).

Catalyst – as defined in col. 8, catalysts are selected from peroxides and azo compounds. More preferred embodiments include peroxide, specifically benzoyl peroxide and MEK peroxide.

Aggregates – as disclosed in col. 9 include silica, barite and mica. Col. 8 further teaches use of clays, coke flour, carbides and the like. Examples further teach use of sand (Table, col. 11).

Fibers – preferred fibers are chopped or milled fiberglass (col. 10). Using fibers increases impact resistance of the composite, modulus and overall mechanical properties (col. 13).

Additives – as defines also in col. 10, additives include pigments, dyes and the like. In the process of ESPELAND, the liquids, which are the resins and peroxide are mixed with dry filler (the aggregate) catalyst however is added last to avoid premature crosslinking. Mixing of the composition is achieved by using standard concrete mixing equipment, which would intrinsically result in agitating (col. 10).

In the light of the above disclosure the prior art of ESPELAND anticipates claims rejected above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over ESPELAND (US 6,034,155) or ESPELAND (US 6,048,593).

In the event the applicants argue the recitation of the patch following is stated. The recitation of the patch is viewed as intended use since applicants do not contribute any structure to the patch in the body of the claims. Applicant's claims are directed to the composition of the polymeric concrete. It should also be noted that any surfacing materials as disclosed above can perform function of the surface patch.

The prior art of ESPELAND discloses composition that can be utilized as a patching material and surfacing for bridge deckings, manholes, and the like. The composition is referred to as concrete composite (col. 1).

Resin – polymers utilized in the composition of ESPELAND include blends of polyester resin both rigid and flexible, vinyl ester polymer, polyester-polyurethane and epoxy (col. 1-2).

Catalyst – as defined in col. 8, catalysts are selected from peroxides and azo compounds. More preferred embodiments include peroxide, specifically benzoyl peroxide and MEK peroxide.

Aggregates – as disclosed in col. 9 include silica, barite and mica. Col. 8 further teaches use of clays, coke flour, carbides and the like. Examples further teach use of sand (Table, col. 11).

Fibers – preferred fibers are chopped or milled fiberglass (col. 10). Using fibers increases impact resistance of the composite, modulus and overall mechanical properties (col. 13).

Additives – as defines also in col. 10, additives include pigments, dyes and the like.

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In the process of ESPELAND, the liquids, which are the resins and peroxide are mixed with dry filler (the aggregate) catalyst however is added last to avoid premature crosslinking. Mixing of the composition is achieved by using standard concrete mixing equipment, which would intrinsically result in agitating (col. 10).

ESPELAND provides surfacing material such as that utilized for bridge decking, which has improved impact resistance of the composite, modulus and overall mechanical properties. In addition the composition of ESPELAND comprises the same components as those taught by the present claims.

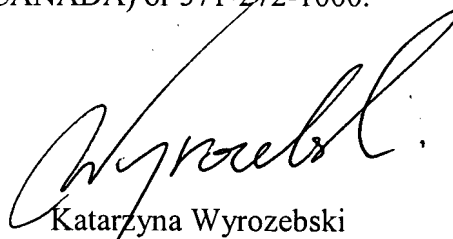
In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention that while practicing the claims of the prior art of ESPELAND one would be capable of providing surfacing material or patch of the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 8:30 AM-2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Katarzyna Wyrozebski  
Primary Examiner  
Art Unit 1714

September 19, 2007